

Socket Bluetooth Tests

August 8, 2001

Mr. Bob Cole
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San Jose, CA 95133

Dear Bob,

With reference to your email from American TCB concerning the possibility of additional testing for the Socket Communications Bluetooth card, we do not feel that any additional testing is necessary for the following reasons:

1) It is obvious from the test report and the User manual introduction that this card was intended to be used both in a laptop with a PCMCIA adapter, or in a PDA CF slot with no adapter. The test report states:

2.1 EUT description

The EUT is a Connectivity Card (DTL-1) operating on the 2.4 GHz – 2.4835 GHz band using Bluetooth technology. It comes with a separate PC Card adapter (FLA-15), which *allows* (italics added by Socket) inserting it to a computer with a PCMCIA slot. The EUT has an integral antenna and no external connections or controls. The EUT is in control of the software delivered with the EUT.

2) The User Manual states:

INTRODUCTION

Nokia Connectivity Card is a PC Card (and a Compact Flash) device that establishes a wireless radio link (Bluetooth) between *PCs with PC card or Compact Flash (CF+) slot* (italics added by Socket) using Bluetooth wireless technology. Bluetooth wireless technology provides a virtual network of devices that can exchange data using microwave radio frequency, 2.4 GHz unlicensed ISM band.

3) Even though the Bluetooth card was tested on a laptop using the FLA-15 adapter, we feel that this was for convenience in testing and will make no difference in the radiation characteristics of the card for the following reasons:

- A. The FLA-15 extender card shielding does not extend over the Bluetooth card. The Bluetooth card has a grounded metal frame in that area, so there should be no difference in radiation characteristics.
- B. PDAs equipped with a CF slot will provide additional shielding of the signals from the connector. They will even shield the Bluetooth card itself, but this should make no difference because the Bluetooth card itself already has its own shield.
- C. The integral antenna extends slightly outside the shields in either configuration to facilitate radiating the signal. The FLA-15 adapter card is not near the antenna. The radiation characteristics should be identical.

We feel that these reasons are sufficient in not requiring any further testing of the Socket Bluetooth Card.

Sincerely,

Larry Lovercheck
Socket Communications, Inc.